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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/081,830	02/21/2002	Jonathan M. Walsh	10559/574001/P12788	3107

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EXAMINER	
SHAW, PELING ANDY	

ART UNIT	PAPER NUMBER
2144	

DATE MAILED: 09/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/081,830	WALSH, JONATHAN M.	
	Examiner	Art Unit	
	Peling A. Shaw	2144	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 June 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1, 4-11, 14-21 and 24-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 4-11, 14-21 and 24-32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 February 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Amendment received on 06/30/2005 has been entered. Claims 1, 7, 11, 17 and 21 are amended. Claims 2-3, 12-13 and 22-23 are cancelled. Claims 27-32 are new. Claims 1, 4-11, 14-21 and 24-32 are still pending.

Priority

2. This application has no priority claim made. The filing date is 02/21/2002.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-26, 28, 30 and 32 are rejected under 35 U.S.C. 102(e) as being anticipated by Gardner et al. (US 6580697 B1), hereinafter referred as Gardner.

a. Regarding claim 1, Gardner disclosed a method of configuring communications over a network comprising: connecting a device to the a network hub (column 1, line 14-24; column 3, line 15-20: switch is also a hub); receiving data on the device from the network hub, including receiving information about a speed at which the network hub is transmitting data (column 1, line 14-24 and 33-46); configuring the device for a communication mode, from a plurality of possible communication modes, wherein

the communication mode includes transferring data between the device and the network simultaneously in time to communicate with the network hub in a half duplex mode (column 1, line 25-33); transferring data between the device and the network hub based on the communication in the half duplex mode using a transmission speed determined based on the received information about the speed at which the network hub is transmitting data (column 1, line 14-24; column 3, line 52-column 4, line 4); determining whether the data has been properly transferred between the device and the network hub in the half duplex mode (column 4, line 5-20); if the data has not been properly transferred between the device and the network hub, configure the device to communicate with the network hub in a full duplex mood, and transfer data between the device and the network hub in the full duplex mode using the transmission speed (column 3, line 36-51; column 4, line 22-41); and determining whether to retain the device in the communication in the full duplex mode (column 4, line 42-46).

b. Regarding claim 4, Gardner disclosed the method of claim 1, wherein the network comprises an Ethernet network (column 3, line 15-20).

c. Regarding claim 5, Gardner disclosed the method of claim 1, wherein the device comprises a medium access controller (column 3, line 15-20: Ethernet).

d. Regarding claim 6, Gardner disclosed the method of claim 1, wherein the device comprises a switch (column 3, line 15-20).

e. Regarding claim 7, Gardner disclosed the method of claim 1, wherein the device comprises a second network hub (column 3, line 15-20: either ends can be a hub).

f. Regarding claim 8, Gardner disclosed the method of claim 1, wherein the device comprises an Ethernet interface card (column 3, line 15-20).

g. Regarding claim 9, Gardner disclosed the method of claim 1, wherein the device comprises a computer (column 3, line 15-20: a computer with Ethernet interface is a network device).

h. Regarding claim 10, Gardner disclosed the method of claim 1, wherein the device comprises an Ethernet peripheral device (column 3, line 15-20: a Ethernet interface is considered as a peripheral to a computer, switch or network device).

i. Regarding claim 11, Gardner disclosed an apparatus (column 3, line 15-20), the apparatus comprising: a memory which stores instructions to determine a speed at which a network hub is transmitting data based on signals sent from the network hub (column 1, line 14-24 and 33-46); configure the apparatus for a communication mode, from a plurality of possible communication modes, wherein the communication mode includes transferring data between the device and the network simultaneously in time to communicate with the network hub in a half duplex mode (column 1, line 25-33), transfer data between the apparatus and the network hub based on the communication mode in the half duplex mode using a transmission speed based on the speed at which the network hub is transmitting data (column 1, line 14-24; column 3, line 52-column 4, line 4), determine whether the data has been properly transferred between the apparatus and the network hub in the half duplex mode (column 4, line 5-20), if the data has not been properly transferred between the apparatus and the network hub, configure the apparatus to communicate with the network hub in a full duplex mode,

and transfer data between the apparatus and the network hub in the full duplex mode using the transmission speed based on the speed at which the network hub is transmitting data (column 3, line 36-51; column 4, line 22-41) and determine whether to retain the apparatus in the communication in the full duplex mode (column 4, line 42-46); and a processor which executes the instructions.

j. Regarding claim 14, Gardner disclosed the apparatus of claim 11, wherein the network comprises an Ethernet network (column 3, line 15-20).

k. Regarding claim 15, Gardner disclosed the apparatus of claim 11, wherein the apparatus is incorporated into a medium access controller (column 3, line 15-20: Ethernet).

l. Regarding claim 16, Gardner disclosed the apparatus of claim 11, wherein the apparatus is incorporated into a switch (column 3, line 15-20).

m. Regarding claim 17, Gardner disclosed the apparatus of claim 11, wherein the apparatus is incorporated into another network hub (column 3, line 15-20: either end can be a hub).

n. Regarding claim 18, Gardner disclosed the apparatus of claim 11, wherein the apparatus is incorporated into an Ethernet interface card (column 3, line 15-20).

o. Regarding claim 19, Gardner disclosed the apparatus of claim 11, wherein the apparatus is incorporated into a computer (column 3, line 15-20: a computer with Ethernet interface is a network device).

p. Regarding claim 20, Gardner disclosed the apparatus of claim 11, wherein the apparatus is incorporated into an Ethernet peripheral device (column 3, line 15-20: a

Ethernet interface is considered as a peripheral to a computer, switch or network device).

q. Regarding claim 21, Gardner disclosed an article comprising a machine-readable medium that stores instructions (column 3, line 15-20) that cause a machine to: receive data from a connected network hub (column 1, line 14-24; column 3, line 15-20: switch is also a hub), including receiving information about a speed at which the network hub is transmitting data (column 1, line 14-24 and 33-46); configure the machine for a communication mode, from a plurality of possible communication modes, for transferring data between the machine and the network, wherein the communication mode includes transferring data between the machine and the network simultaneously in time to communicate with the network hub in a half duplex mode (column 1, line 25-33); transfer data between the machine and the network hub based on the determined communication in the half duplex mode using a transmission speed based on the speed at which the network hub is transmitting data (column 1, line 14-24; column 3, line 52-column 4, line 4); determining whether the data has been properly transferred between the machine and the network hub in the half duplex mode (column 4, line 5-20); if the data has not been properly transferred between the machine and the network hub, configure the machine to communicate with the network hub in a full duplex mood, and transfer data between the machine and the network hub in the full duplex mode using the transmission speed at which the network hub is transmitting data (column 3, line 36-51; column 4, line 22-41); and

determine whether to retain the machine in the communication full duplex mode (column 4, line 42-46).

r. Regarding claim 24, Gardner disclosed the machine-readable medium of claim 21 is a random access memory (column 3, line 15-20: a computer with Ethernet interface).

s. Regarding claim 25, Gardner disclosed the machine-readable medium of claim 21 is a read only memory (column 3, line 15-20: a computer with Ethernet interface).

t. Regarding claim 26, Gardner disclosed the machine-readable medium of claim 21 is a hard disk drive (column 3, line 15-20: a computer with Ethernet interface).

u. Regarding claim 28, Gardner disclosed the method of claim 1 in which receiving information about the speed at which the network hub is transmitting data comprises receiving signals transmitted by the network hub during network idle times (column 1, line 33-46; column 3, line 36-46).

v. Regarding claim 30, Gardner disclosed the method of claim 11 in which determine the speed at which the network hub is transmitting data comprises determine the speed at which the network hub is transmitting data based on signals sent from the network hub during network idle times (column 1, line 33-46; column 3, line 36-46).

w. Regarding claim 32, Gardner disclosed the article of claim 21 in which receiving information about the speed at which the network hub is transmitting data comprises receiving signals transmitted by the network hub during network idle times (column 1, line 33-46; column 3, line 36-46).

Gardner disclosed all limitations of claims 1-26, 28, 30 and 32. Claims 1-26, 28, 30 and 32 are rejected under 35 U.S.C. 102(e).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over (US 6580697 B1), hereinafter referred as Gardner as applied to claim 1 above, and further in view of Feuerstraeter et al. (US 6285659 B1), hereinafter referred as Feuerstraeter.

a. Gardner shows (claim 1) a method of configuring communications over a network comprising: connecting a device to the a network hub (column 1, line 14-24; column 3, line 15-20: switch is also a hub); receiving data on the device from the network hub, including receiving information about a speed at which the network hub is transmitting data (column 1, line 14-24 and 33-46); configuring the device for a communication mode, from a plurality of possible communication modes, wherein the communication mode includes transferring data between the device and the network simultaneously in time to communicate with the network hub in a half duplex mode (column 1, line 25-33); transferring data between the device and the network hub based on the communication in the half duplex mode using a transmission speed determined based on the received information about the speed at which the network hub is transmitting data (column 1, line 14-24; column 3, line 52-column 4, line 4); determining whether the data has been properly transferred

between the device and the network hub in the half duplex mode (column 4, line 5-20); if the data has not been properly transferred between the device and the network hub, configure the device to communicate with the network hub in a full duplex mood, and transfer data between the device and the network hub in the full duplex mode using the transmission speed (column 3, line 36-51; column 4, line 22-41); and determining whether to retain the device in the communication in the full duplex mode (column 4, line 42-46). Gardner does not show (claim 27) in which receiving information about the speed at which the network hub is transmitting data comprises receiving Fast Link Pulses from the network hub. Gardner does show (column 1, line 33-46) auto negotiation according to IEEE standard 802.3u.

b. Feuerstraeter shows (claim 27) in which receiving information about the speed at which the network hub is transmitting data comprises receiving Fast Link Pulses from the network hub (column 3, line 28-35) in an analogous art for the purpose of automatic protocol selection mechanism.

c. It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify Gardner's functions of advanced ethernet auto negotiation with Feuerstraeter's functions of auto negotiation using fast link pulses.

d. The modification would have been obvious because one of ordinary skill in the art would have been motivated to use fast link pulses per Feuerstraeter's teaching in auto negation per both Feuerstraeter's and Gardner's teaching.

Together Gardner and Feuerstraeter disclosed all limitations of claim 27. Claim 27 is rejected under 35 U.S.C. 103(a).

5. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over (US 6580697 B1), hereinafter referred as Gardner as applied to claim 11 above, and further in view of Feuerstraeter et al. (US 6285659 B1), hereinafter referred as Feuerstraeter.

a. Gardner shows (claim 11) an apparatus (column 3, line 15-20), the apparatus comprising: a memory which stores instructions to determine a speed at which a network hub is transmitting data based on signals sent from the network hub (column 1, line 14-24 and 33-46); configure the apparatus for a communication mode, from a plurality of possible communication modes, wherein the communication mode includes transferring data between the device and the network simultaneously in time to communicate with the network hub in a half duplex mode (column 1, line 25-33), transfer data between the apparatus and the network hub based on the communication mode in the half duplex mode using a transmission speed based on the speed at which the network hub is transmitting data (column 1, line 14-24; column 3, line 52-column 4, line 4), determine whether the data has been properly transferred between the apparatus and the network hub in the half duplex mode (column 4, line 5-20), if the data has not been properly transferred between the apparatus and the network hub, configure the apparatus to communicate with the network hub in a full duplex mode, and transfer data between the apparatus and the network hub in the full duplex mode using the transmission speed based on the speed at which the network hub is transmitting data (column 3, line 36-51; column 4, line 22-41) and determine whether to retain the apparatus in the communication in the full duplex mode (column 4, line 42-46); and a processor which executes the instructions. Gardner does not show

(claim 29) in which the signals sent from the network hub comprises Fast Link Pulses. Gardner does show (column 1, line 33-46) auto negotiation according to IEEE standard 802.3u.

b. Feuerstraeter shows (claim 29) in which the signals sent from the network hub comprises Fast Link Pulses (column 3, line 28-35) in an analogous art for the purpose of automatic protocol selection mechanism.

c. It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify Gardner's functions of advanced ethernet auto negotiation with Feuerstraeter's functions of auto negotiation using fast link pulses.

d. The modification would have been obvious because one of ordinary skill in the art would have been motivated to use fast link pulses per Feuerstraeter's teaching in auto negation per both Feuerstraeter's and Gardner's teaching.

Together Gardner and Feuerstraeter disclosed all limitations of claim 29. Claim 29 is rejected under 35 U.S.C. 103(a).

6. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over (US 6580697 B1), hereinafter referred as Gardner as applied to claim 21 above, and further in view of Feuerstraeter et al. (US 6285659 B1), hereinafter referred as Feuerstraeter.

a. Gardner shows (claim 21) an article comprising a machine-readable medium that stores instructions (column 3, line 15-20) that cause a machine to: receive data from a connected network hub (column 1, line 14-24; column 3, line 15-20: switch is also a hub), including receiving information about a speed at which the network hub is transmitting data (column 1, line 14-24 and 33-46); configure the machine for a

communication mode, from a plurality of possible communication modes, for transferring data between the machine and the network, wherein the communication mode includes transferring data between the machine and the network simultaneously in time to communicate with the network hub in a half duplex mode (column 1, line 25-33); transfer data between the machine and the network hub based on the determined communication in the half duplex mode using a transmission speed based on the speed at which the network hub is transmitting data (column 1, line 14-24; column 3, line 52-column 4, line 4); determining whether the data has been properly transferred between the machine and the network hub in the half duplex mode (column 4, line 5-20); if the data has not been properly transferred between the machine and the network hub, configure the machine to communicate with the network hub in a full duplex mood, and transfer data between the machine and the network hub in the full duplex mode using the transmission speed at which the network hub is transmitting data (column 3, line 36-51; column 4, line 22-41); and determine whether to retain the machine in the communication full duplex mode (column 4, line 42-46). Gardner does not show (claim 31) in which receiving information about the speed at which the network hub is transmitting data comprises receiving Fast Link Pulses from the network hub. Gardner does show (column 1, line 33-46) auto negotiation according to IEEE standard 802.3u.

b. Feuerstraeter shows (claim 31) in which receiving information about the speed at which the network hub is transmitting data comprises receiving Fast Link Pulses from

the network hub (column 3, line 28-35) in an analogous art for the purpose of automatic protocol selection mechanism.

c. It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify Gardner's functions of advanced ethernet auto negotiation with Feuerstraeter's functions of auto negotiation using fast link pulses.

d. The modification would have been obvious because one of ordinary skill in the art would have been motivated to use fast link pulses per Feuerstraeter's teaching in auto negation per both Feuerstraeter's and Gardner's teaching.

Together Gardner and Feuerstraeter disclosed all limitations of claim 31. Claim 31 is rejected under 35 U.S.C. 103(a).

Response to Arguments

7. Applicant's arguments with respect to pending claims have been considered but are moot in view of the new ground(s) of rejection.

Remarks

8. The following pertaining arts are discovered and not used in this office action. Office reserves the right to use these arts in later actions.

a. Crayford (US 5673254 A) Enhancements to 802.3 media access control and associated signaling schemes for ethernet switching

b. Bill Bunch, February 1995, Converted to HTML and edited by Donald Becker, April 1995 An Introduction to Auto-Negotiation

Conclusion

9. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Refer to the enclosed PTO-892 for details.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peling A. Shaw whose telephone number is (571) 272-7968. The examiner can normally be reached on M-F 8:00 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the statu9s of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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